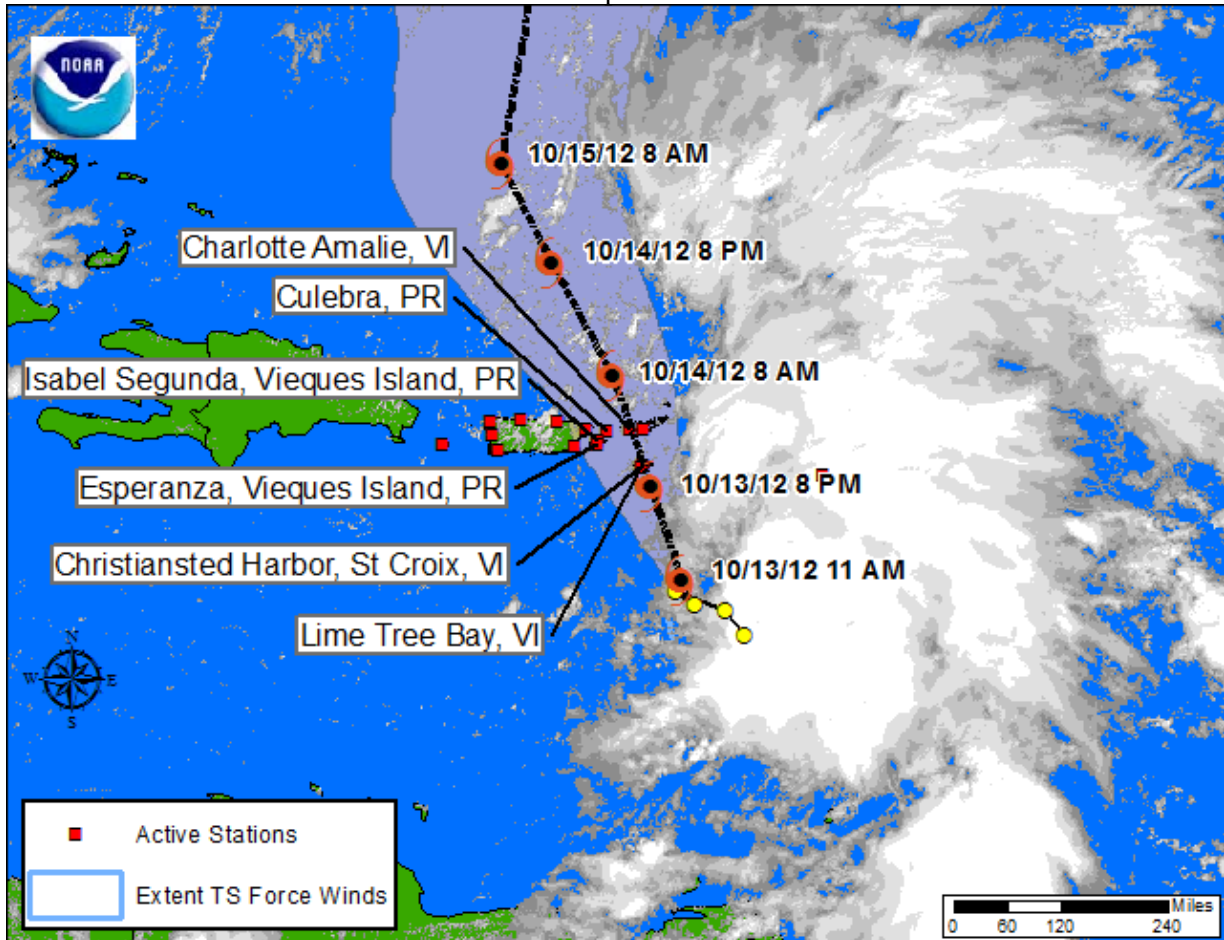




Tropical Storm RAFAEL QuickLook
Posted: 12:00 AST 10/13/2012

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 10/13/2012 12:00 AST, water levels across the U.S. Virgin Islands and Barbuda are slightly elevated and range from 0.40 to 0.79 feet above tidal predictions. Wind speeds are generally below 10 kts with slightly higher gusts. Barometric pressure continues to fall across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Lime Tree Bay, VI: Next predicted high tides are 0.7 ft (0.21 m) at 10/13/2012 16:35 AST and 0.8 ft (0.25 m) at 10/14/2012 08:31 AST.

Christiansted Harbor, St Croix, VI: Next predicted high tides are 0.5 ft (0.14 m) at 10/13/2012 17:47 AST and 0.7 ft (0.20 m) at 10/14/2012 07:50 AST.

Tropical Storm RAFAEL QuickLook, POSTED 12:00 AST 10/13/2012

Charlotte Amalie, VI: Next predicted high tides are 0.8 ft (0.24 m) at 10/13/2012 18:32 AST and 1.0 ft (0.31 m) at 10/14/2012 08:02 AST.

Culebra, PR: Next predicted high tides are 1.2 ft (0.35 m) at 10/13/2012 18:38 AST and 1.4 ft (0.43 m) at 10/14/2012 07:29 AST.

Isabel Segunda, Vieques Island, PR: Next predicted high tides are 1.1 ft (0.35 m) at 10/13/2012 18:53 AST and 1.4 ft (0.44 m) at 10/14/2012 07:41 AST.

Esperanza, Vieques Island, PR: Next predicted high tides are 0.5 ft (0.14 m) at 10/13/2012 17:36 AST and 0.6 ft (0.19 m) at 10/14/2012 07:21 AST.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see [Tidal Datums](#). For more information or archived products and reports, please see the [Storm QuickLook](#) Homepage.

Analyst:LH

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM RAFAEL ADVISORY NUMBER 4
NWS NATIONAL HURRICANE CENTER MIAMI FL AL172012
1100 AM AST SAT OCT 13 2012

...HEAVY RAINS CONTINUING OVER THE LESSER ANTILLES AS RAFAEL MOVES
NORTH-NORTHWESTWARD...

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY...

THE TROPICAL STORM WATCH FOR THE ISLANDS OF CULEBRA AND VIEQUES HAS BEEN
CHANGED TO A TROPICAL STORM WARNING.

THE GOVERNMENT OF FRANCE HAS DISCONTINUED THE TROPICAL STORM WARNING FOR
MARTINIQUE.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- * CULEBRA AND VIEQUES
- * U.S. VIRGIN ISLANDS
- * BRITISH VIRGIN ISLANDS
- * ANGUILLA...BARBUDA...ST. KITTS... NEVIS...ANTIGUA...AND MONTSERRAT
- * SABA...ST. EUSTATIUS...AND ST. MAARTIN
- * ST. MARTIN
- * GUADELOUPE...DESIRADE...LES SAINTES...MARIE GALANTE

A TROPICAL STORM WATCH IS IN EFFECT FOR...

* PUERTO RICO

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA...IN THIS CASE WITHIN THE NEXT 12 TO 24 HOURS.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 1100 AM AST...1500 UTC...THE CENTER OF TROPICAL STORM RAFAEL WAS LOCATED NEAR LATITUDE 15.9 NORTH...LONGITUDE 64.1 WEST. RAFAEL IS MOVING TOWARD THE NORTH NORTHWEST NEAR 9 MPH....AND THIS GENERAL MOTION IS EXPECTED TO CONTINUE THROUGH EARLY MONDAY. ON THE FORECAST TRACK...THE CENTER OF RAFAEL IS EXPECTED TO MOVE NEAR OR OVER THE VIRGIN ISLANDS TONIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 40 MPH...WITH HIGHER GUSTS. SOME STRENGTHENING IS FORECAST DURING THE NEXT 48 HOURS.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 175 MILES...MAINLY TO THE SOUTHEAST OF THE CENTER.

THE ESTIMATED MINIMUM CENTRAL PRESSURE IS 1006 MB...29.71 INCHES.

HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS WILL CONTINUE TO SPREAD ACROSS THE WARNING AREA IN THE LESSER ANTILLES AND THE VIRGIN ISLANDS TODAY...AND REACH CULEBRA AND VIEQUES TONIGHT. TROPICAL STORM CONDITIONS ARE POSSIBLE OVER PUERTO RICO TONIGHT AND SUNDAY.

RAINFALL...RAFAEL IS EXPECTED TO PRODUCE TOTAL RAINFALL AMOUNTS OF 3 TO 5 INCHES...WITH ISOLATED MAXIMUM AMOUNTS OF 10 INCHES...OVER THE LESSER ANTILLES...THE VIRGIN ISLANDS...CULEBRA AND VIEQUES. THESE RAINS COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUDSLIDES...ESPECIALLY IN AREAS OF MOUNTAINOUS TERRAIN.

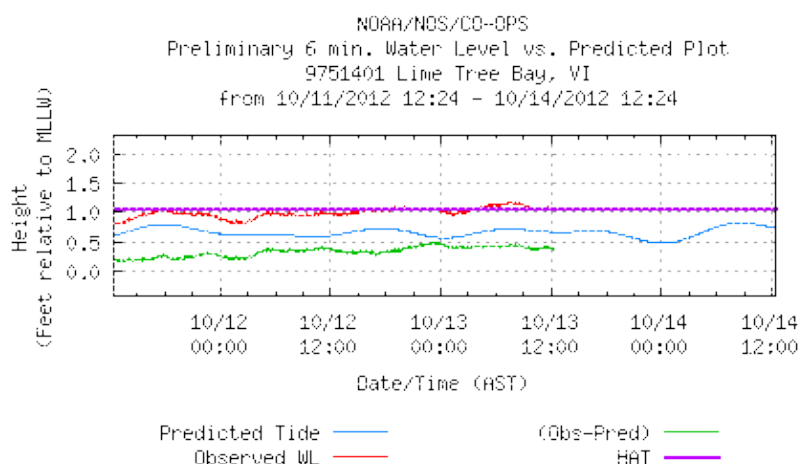
SURF...DANGEROUS SURF CONDITIONS ARE POSSIBLE IN THE LESSER ANTILLES AND THE VIRGIN ISLANDS THROUGH SUNDAY.

FORECASTER BRENNAN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Lime Tree Bay - Water Level](#), [Lime Tree Bay - Winds](#), [Lime Tree Bay - Barometric](#), [Charlotte Amalie - Water Level](#), [Charlotte Amalie - Winds](#), [Charlotte Amalie - Barometric](#), [Culebra - Water Level](#), [Culebra - Winds](#), [Culebra - Barometric](#), [Isabel Segunda, Vieques Island - Water Level](#), [Isabel Segunda, Vieques Island - Winds](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Esperanza, Vieques Island - Barometric](#), [Christiansted Harbor, St Croix - Water Level](#), [Christiansted Harbor, St Croix - Winds](#),

Lime Tree Bay, VI - Return to List

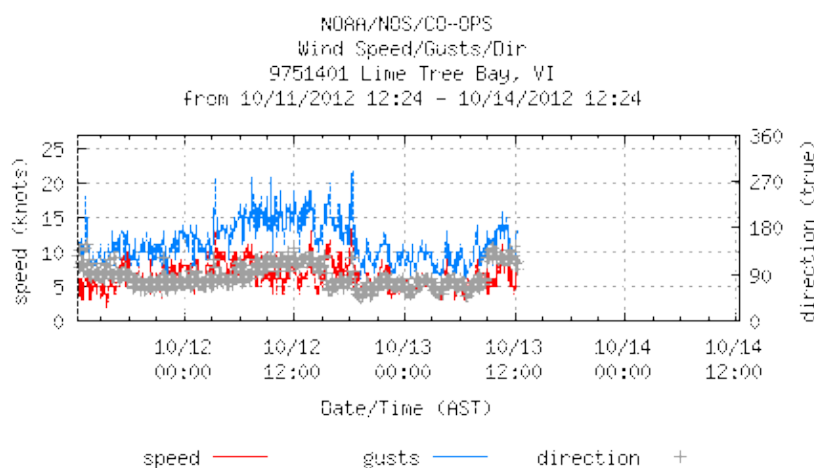


Last Observed Sample: 10/13/2012 12:18 (AST)

Relative to MLLW: **Observed: 1.03 ft.** **Predicted: 0.66 ft.** **Residual: 0.37 ft.**

Historical Maximum Water Level: Nov 17 1999, 1.88 ft. above MHHW

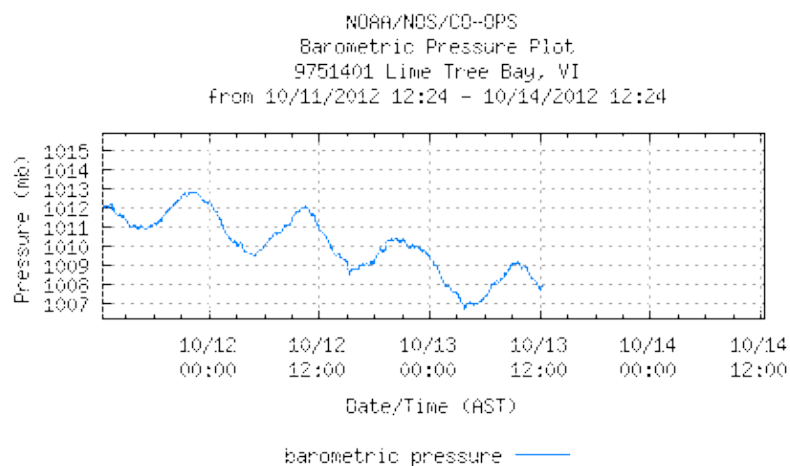
Lime Tree Bay, VI - Return to List



Last Observed Sample: 10/13/2012 12:18 (AST)

Wind Speed: 7 knots **Gusts: 13 knots** **Direction: 116° T**

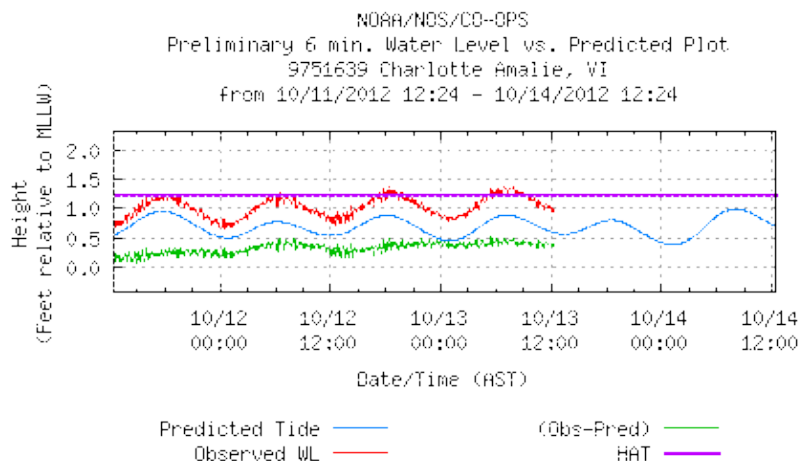
Lime Tree Bay, VI - Return to List



Last Observed Sample: 10/13/2012 12:18 (AST)

Barometric Pressure: 1007.9 mb

Charlotte Amalie, VI - Return to List

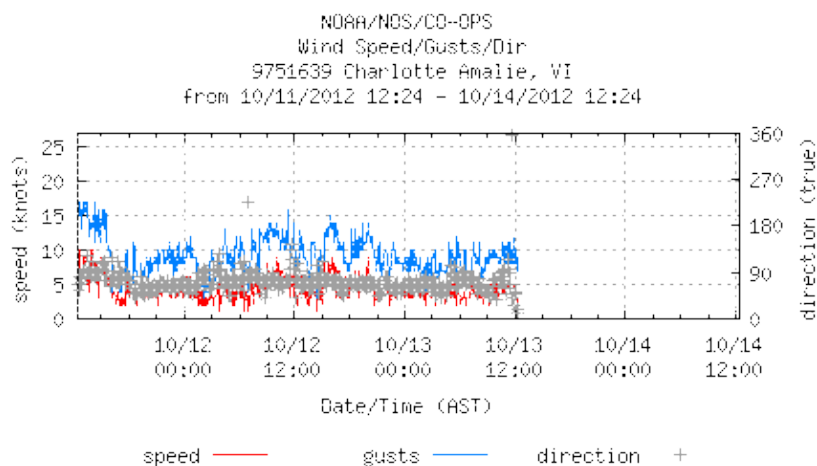


Last Observed Sample: 10/13/2012 12:18 (AST)

Relative to MLLW: Observed: 0.99 ft. Predicted: 0.59 ft. Residual: 0.40 ft.

Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW

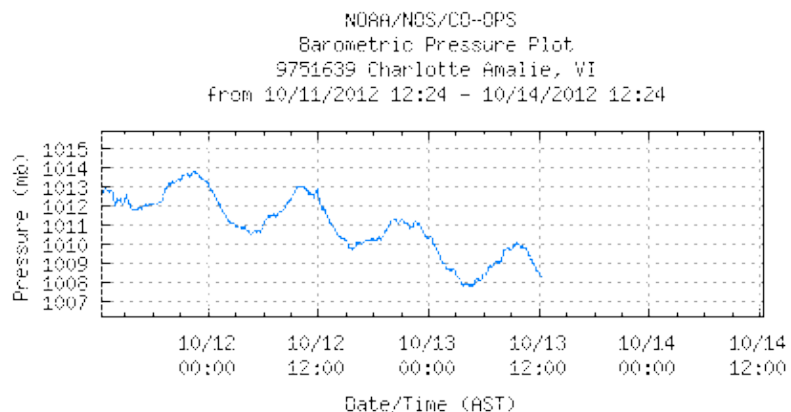
[Charlotte Amalie, VI - Return to List](#)



Last Observed Sample: 10/13/2012 12:18 (AST)

Wind Speed: 2 knots Gusts: 9 knots Direction: 17° T

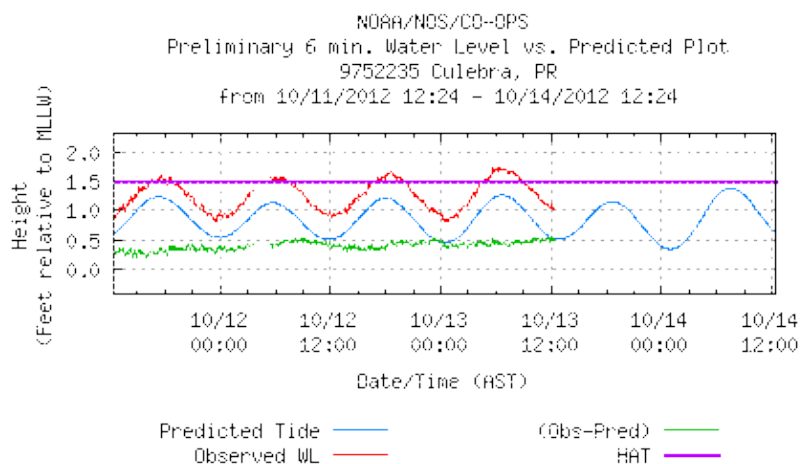
[Charlotte Amalie, VI - Return to List](#)



Last Observed Sample: 10/13/2012 12:18 (AST)

Barometric Pressure: 1008.3 mb

Culebra, PR - Return to List

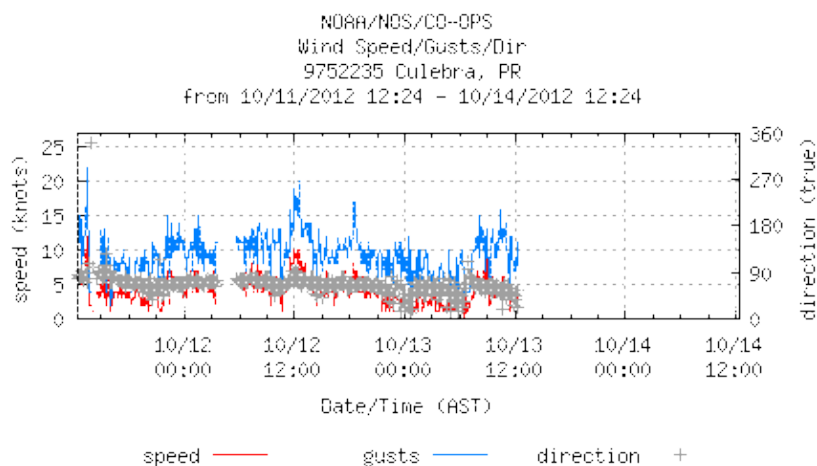


Last Observed Sample: 10/13/2012 12:18 (AST)

Relative to MLLW: **Observed: 1.05 ft.** **Predicted: 0.53 ft.** **Residual: 0.52 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.85 ft. above MHHW

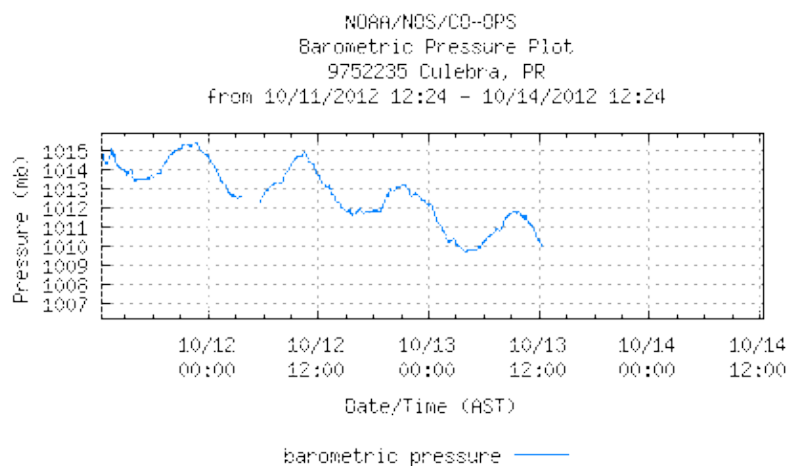
Culebra, PR - Return to List



Last Observed Sample: 10/13/2012 12:18 (AST)

Wind Speed: 5 knots **Gusts: 11 knots** **Direction: 23° T**

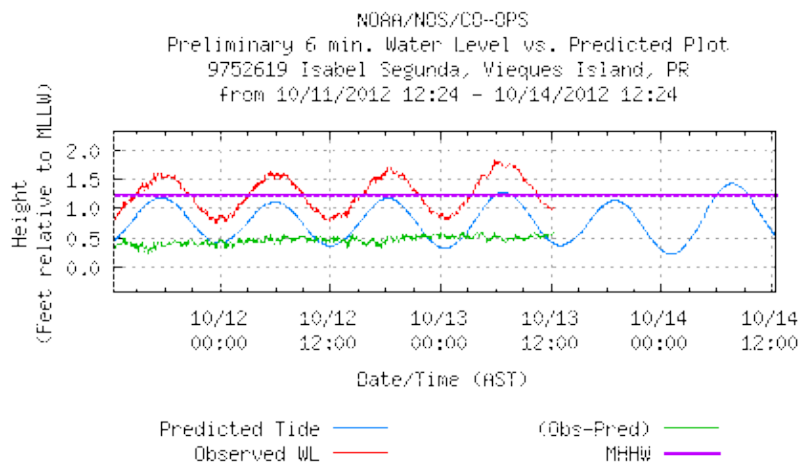
Culebra, PR - Return to List



Last Observed Sample: 10/13/2012 12:18 (AST)

Barometric Pressure: 1010.0 mb

Isabel Segunda, Vieques Island, PR - Return to List

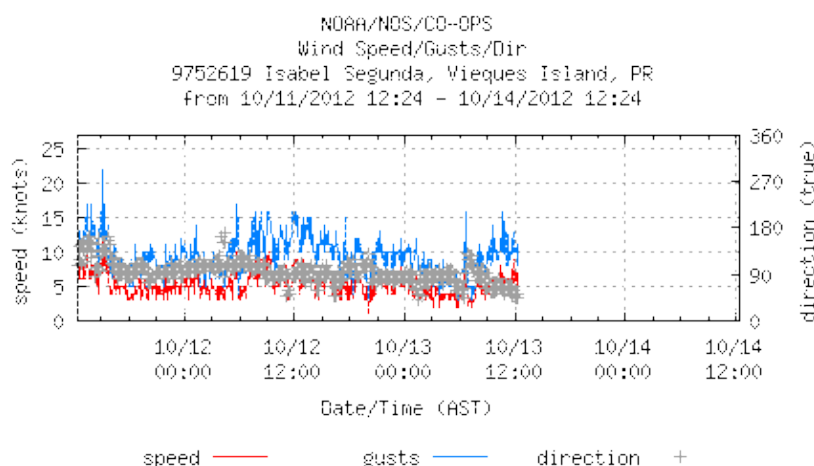


Last Observed Sample: 10/13/2012 12:18 (AST)

Relative to MLLW: Observed: 1.00 ft. Predicted: 0.40 ft. Residual: 0.60 ft.

Historical Maximum Water Level: , 0 ft. above MHHW

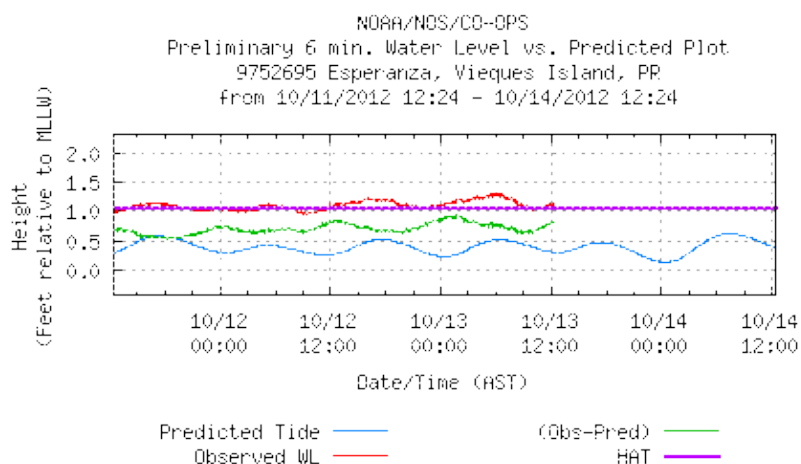
Isabel Segunda, Vieques Island, PR - Return to List



Last Observed Sample: 10/13/2012 12:18 (AST)

Wind Speed: 5 knots Gusts: 8 knots Direction: 53° T

Esperanza, Vieques Island, PR - Return to List

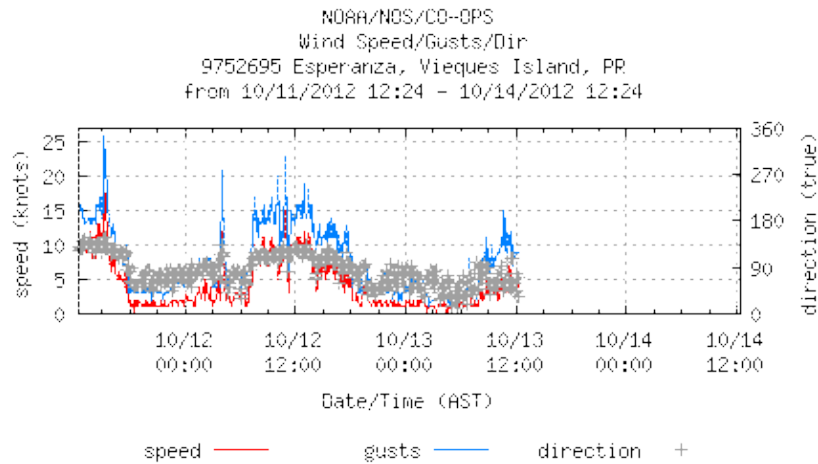


Last Observed Sample: 10/13/2012 12:18 (AST)

Relative to MLLW: Observed: 1.11 ft. Predicted: 0.31 ft. Residual: 0.80 ft.

Historical Maximum Water Level: Aug 22 2011, 1.04 ft. above MHHW

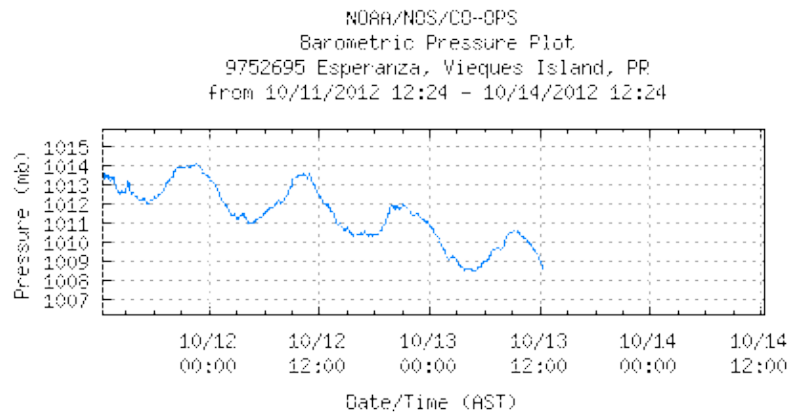
[Esperanza, Vieques Island, PR - Return to List](#)



Last Observed Sample: 10/13/2012 12:18 (AST)

Wind Speed: 5 knots Gusts: 9 knots Direction: 33° T

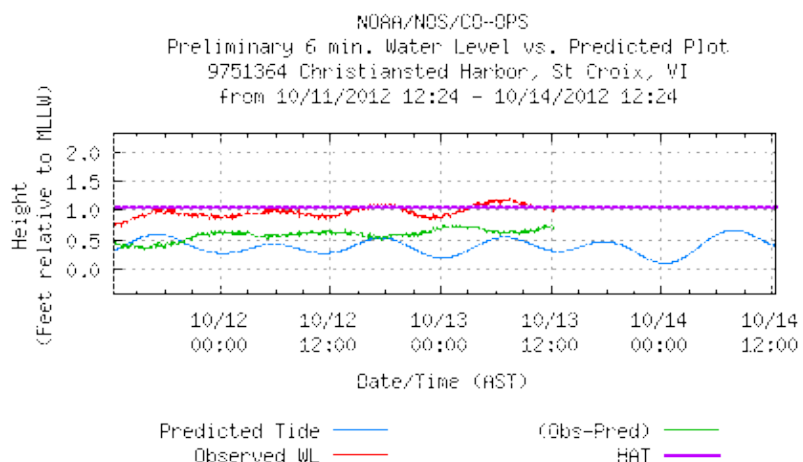
[Esperanza, Vieques Island, PR - Return to List](#)



Last Observed Sample: 10/13/2012 12:18 (AST)

Barometric Pressure: 1008.6 mb

Christiansted Harbor, St Croix, VI - Return to List

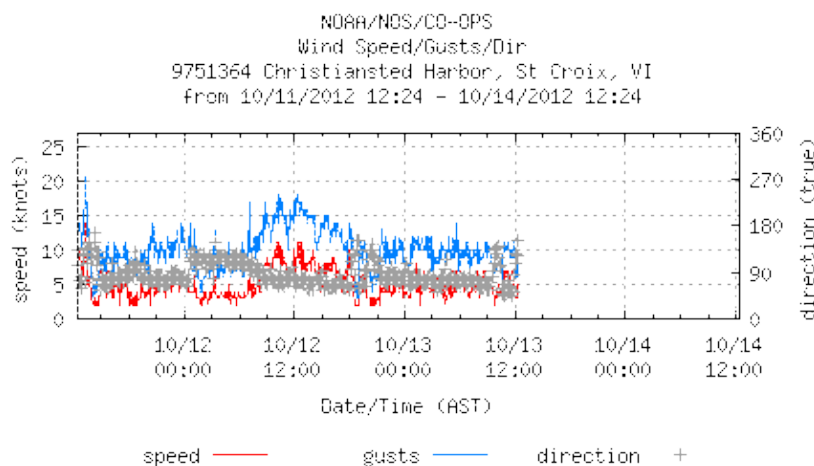


Last Observed Sample: 10/13/2012 12:18 (AST)

Relative to MLLW: **Observed: 0.99 ft.** **Predicted: 0.31 ft.** **Residual: 0.68 ft.**

Historical Maximum Water Level: Oct 16 2008, 1.17 ft. above MHHW

Christiansted Harbor, St Croix, VI - Return to List



Last Observed Sample: 10/13/2012 12:18 (AST)

Wind Speed: 5 knots **Gusts: 9 knots** **Direction: 122° T**

Tropical Storm RAFAEL QuickLook, POSTED 12:00 AST 10/13/2012

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce